Amendments to the Specification:

Please replace paragraphs [0001], [0006], [0014], [0044], [0045], [0057], [0058], [0061], [0064], and [0065] with the following corresponding amended paragraphs:

[0001] The invention relates to data network management, and in particular to methods of inspecting ~~managing~~ Open Systems Interconnection (OSI) Layer-3 managed data network entities in a centralized network management context.

[0006] The paradigm of a data network path taken by PDUs as a "managed data network entity" does not make sense in this arrangement as PDUs are routed at every data network node and ~~subsequence~~ subsequent PDUs may not use the same data transport path in the data transport network by design.

[0014] Provisioning data transport services ensuring Quality-of-Service, requires the establishment of data transport paths. Data transport paths are established between routers. Typical router management for standalone router devices included the use of element management software. Element management techniques focuses on managing the router and the data transport paths associated therewith on a router-by-router basis. Performing router management using element management techniques suffers from a limited view of the data network resources. As opposed to data transport paths which are governed by standardized data transport protocols, routers have a vendor specific implementation using vendor and typically router specific element management tools. Therefore network management solutions providing data transport services at QoS guarantees require the skills of an analyst having experience in configuring multi vendor routing equipment.

[0044] A Layer-2 logical interface 154, also referred to as a link layer-2 interface, is used as a sub-layer interface. Link layer interfaces 154 are tailored according to the data transport protocol used for each corresponding data link ~~162~~ 160 used. Exemplary data transport protocols used include, but are not limited to: ATM, FR, etc. Corresponding layer-2 interface 154 specifications include Virtual Path Identifiers (VPI) / Virtual Circuit

Identifiers (VCI) and Data Link Connection Identifier (DLCI) respectively. PPP session specification may also be used to configure the Layer-2 interface 154.

[0045] A Layer-1 logical interface 156, also referred to as physical layer-1 ~~-2~~ interface, is also used as a sub-layer interface. Physical layer interfaces 156 are tailored according to the data transport used as well as the port 112 configuration used for each corresponding physical link 108 used. Exemplary data ports 112 used include, but are not limited to: ATM, FR, POS, Gigabit Ethernet, Ethernet (ports), etc.

[0057] These Layer-3 representations besides showing the routers 130, the end nodes 102 and the data transport path 128, provide very little other information ~~about~~. Although the information is limited, such representation is preferred eliminating unnecessarily complicating details associated with the lower OSI Layer-2 and -1 data transport equipment provisioning the data transport path 128.

[0058] A second view pane 620 shows Layer-2 connectivity information associated with selected 604 Layer 3 entities in pane 610 – for example the data transport path 128. The selection is typically made via the use of pointing capabilities of the graphical user interface of the NMS 140 system.

[0061] In managing data transport paths 128, an analyst (not shown) interacts with the NMS 140 via the graphical user interface. In accordance with a high level Layer-3 representation of the connectivity information corresponding to a selected data transport path 128, the analyst is provided with a schematic representation thereof showing the data transport path 128 spanned between Routers 130A and 130B.

[0064] For example, further drilling down through the connectivity information associated with the data transport path 128, the analyst is able to ascertain that the end node 102A is an ATM aggregation node, that the ATM data transport 710 between nodes 102A and 102C has two hops via an intermediary ATM node 102D. Two data links (160) are shown: a first data link 712 between ATM nodes 102A and 102D, and a second data link 714 between ATM node 102D and the gateway node 102C. The Layer 2

representation includes the Layer 2 configuration information including the VPI/VCI used over the data links 712 and 714.

[0065] The data transport (720) between the gateway node 102C and the FR edge node 102B is shown to be provided via a FR data link spanned between the ~~ADM~~ gateway node 102C and the ~~ATM~~ FR edge node 102B. The Layer 2 representation includes the Layer 2 configuration information including the DLCI used over the data link 722.